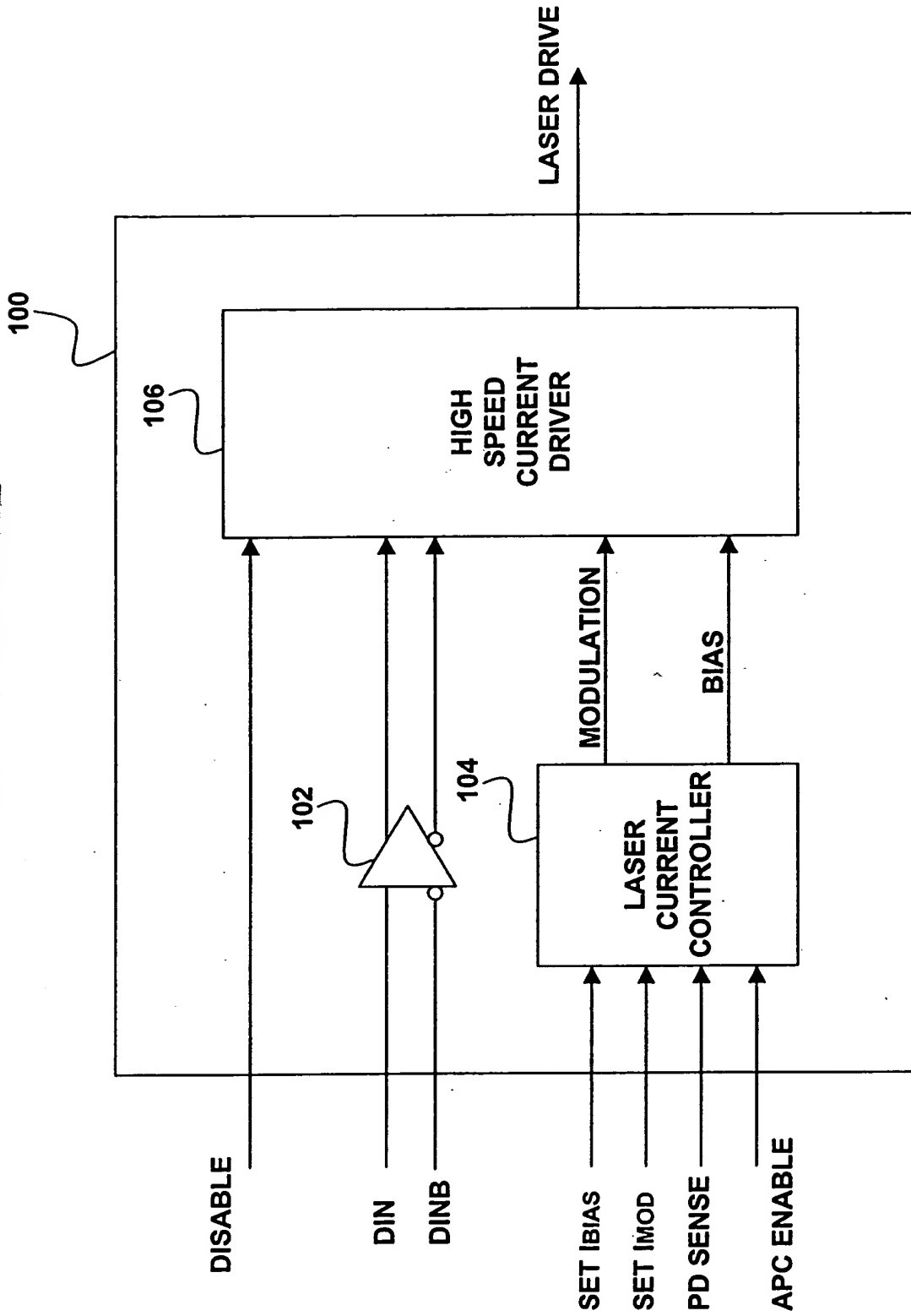FIG. 1
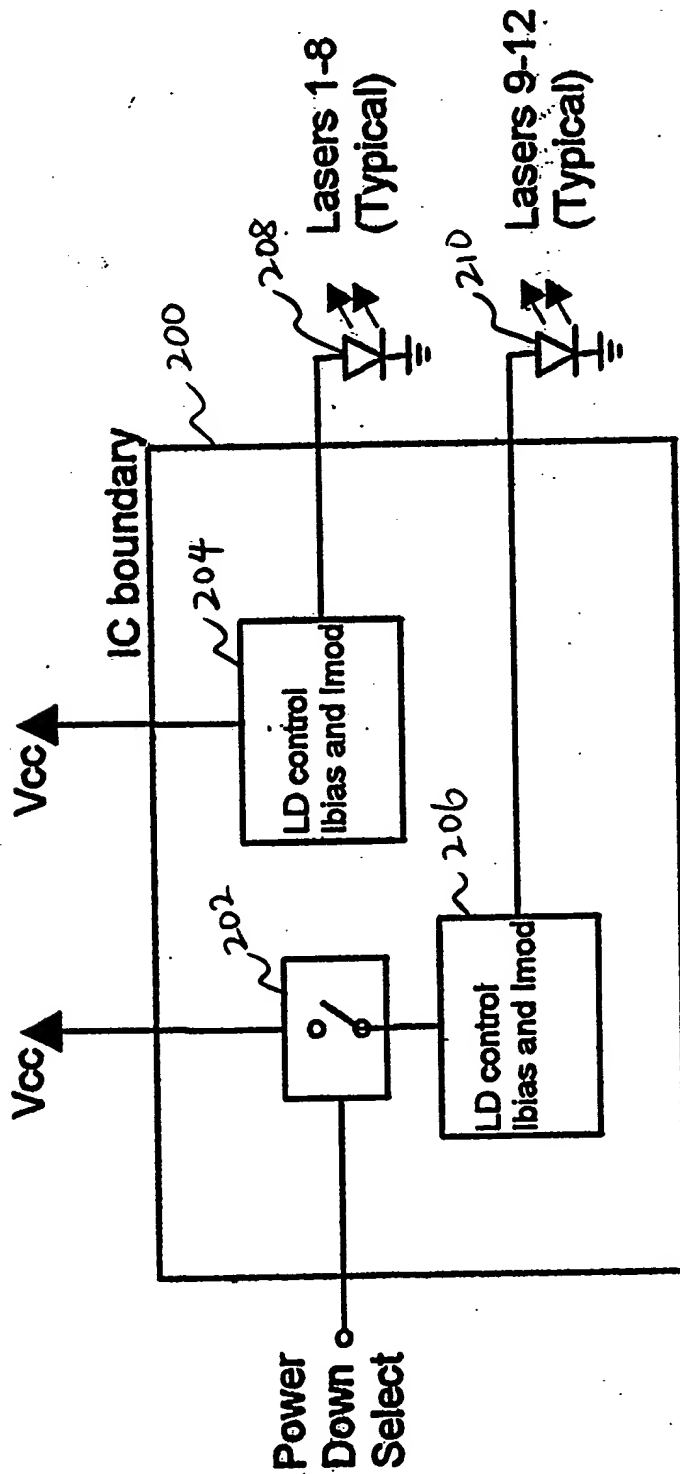
FIG. 2
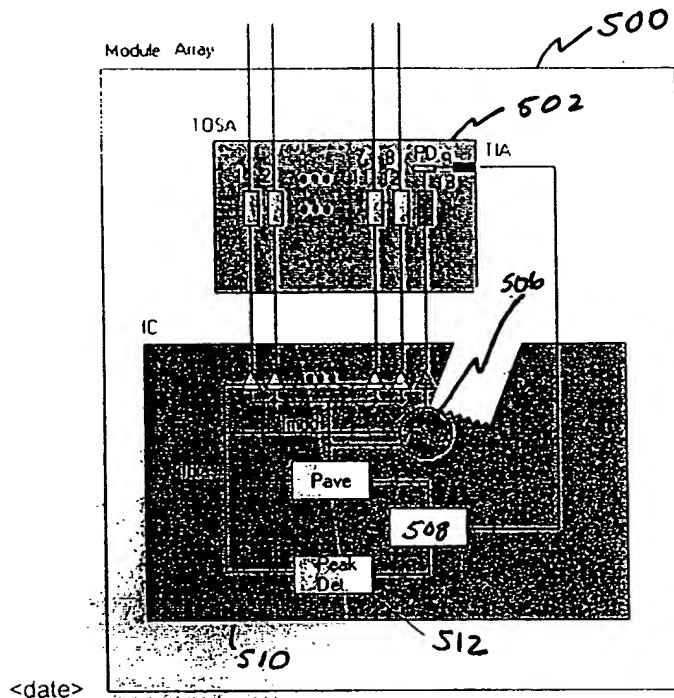
FIG. 3
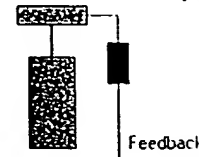
FIG. 4

Option 1: Extra Laser, Use of control laser for Feedback.
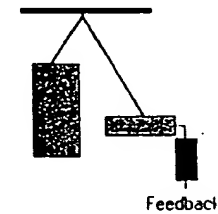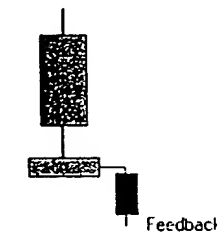

FIGURE 5

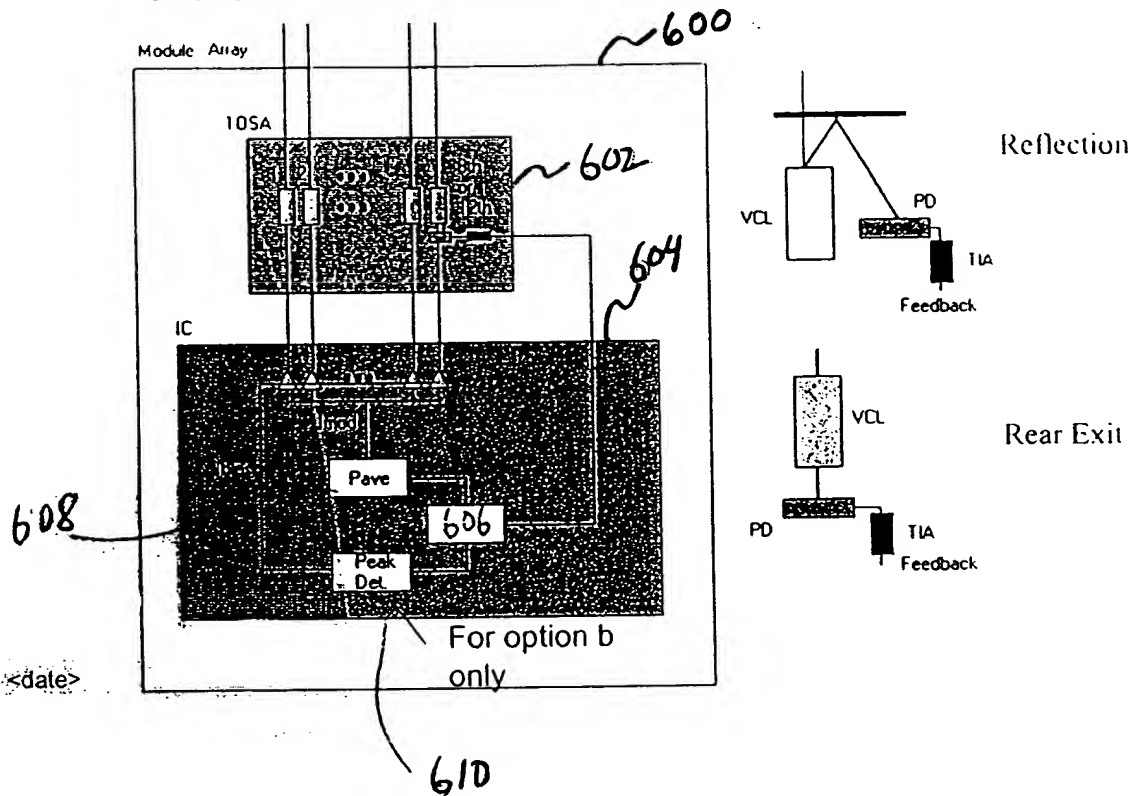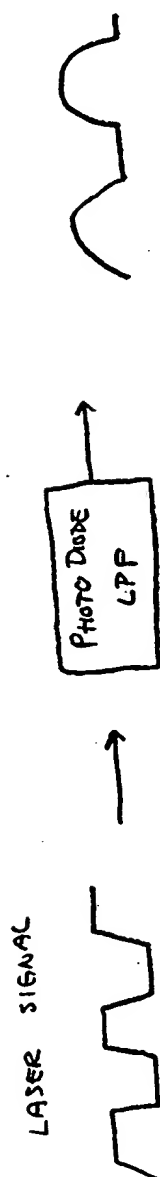# Option 2 a & b : Use of Data Laser for Feedback
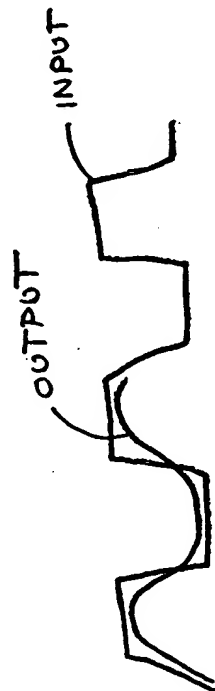

Figure 6

FIG. 7A
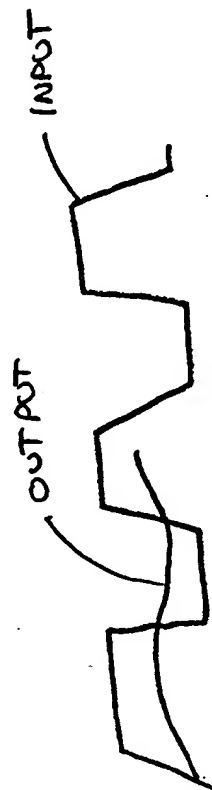General Case

FIG. 7B
High BW, Low Capacitance Photodiode

FIG. 7C
Low BW, High Capacitance Photodiode

LASER SIGNAL

PHOTO DIODE LPF

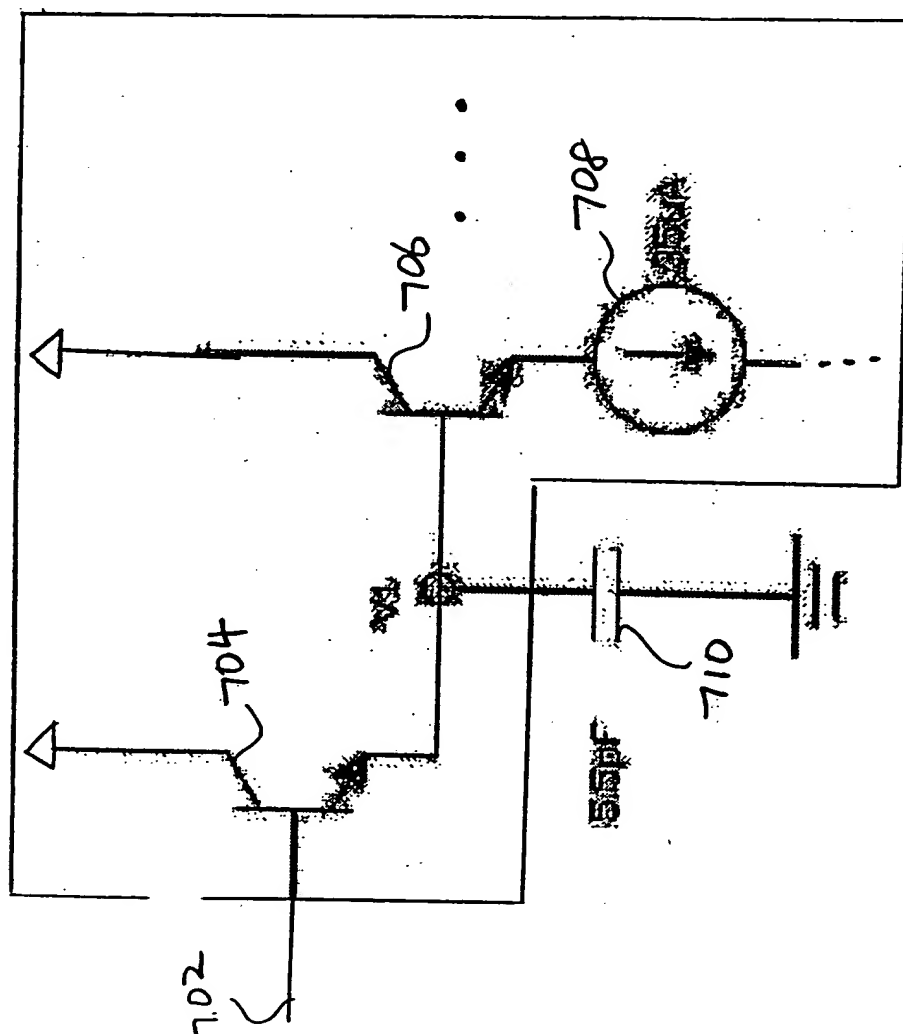INPUT

OUTPUT

INPUT

OUTPUT

FIG. 8

FIG. 9

IC array

3.3 V Nominal

2.5 V Nominal

756

750

754

752

Laser output stage functions

2.5 volt operation functions

FIG. 10

On Voltage > XX

Off Voltage < 1.5 V

FIG. 11

To define the problem

810

Desired waveform

time

812

Waveform resulting from dip
Data Rate at OC3 speeds

814

Eye diagram - Suffering from Baseline
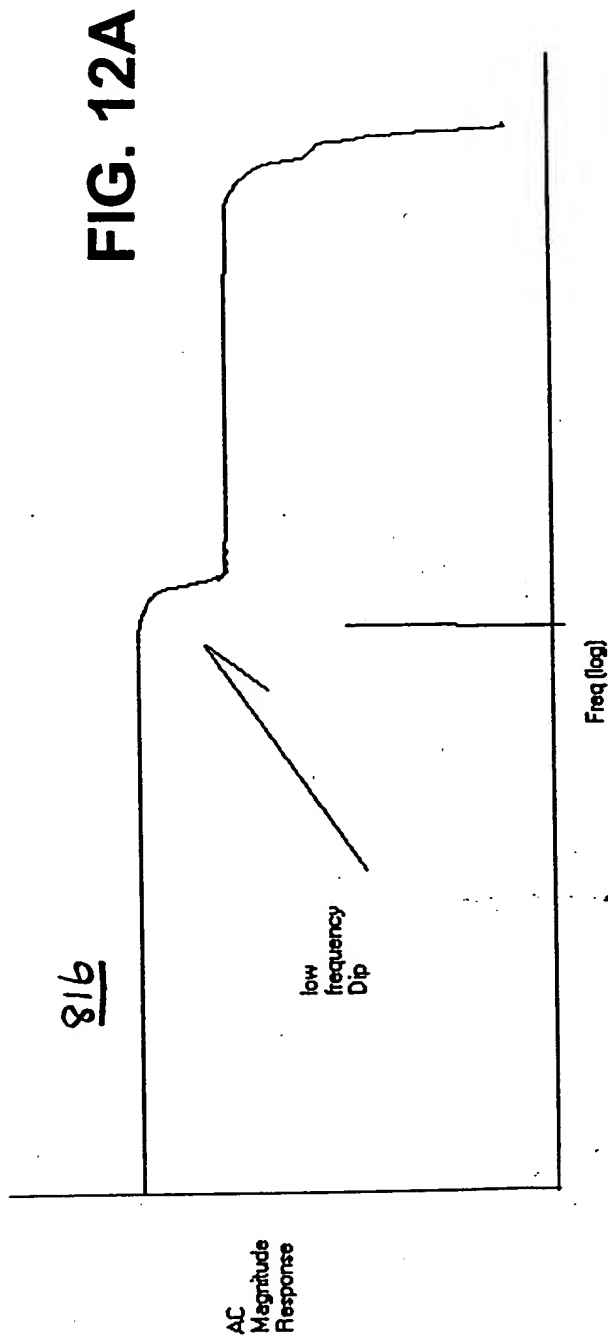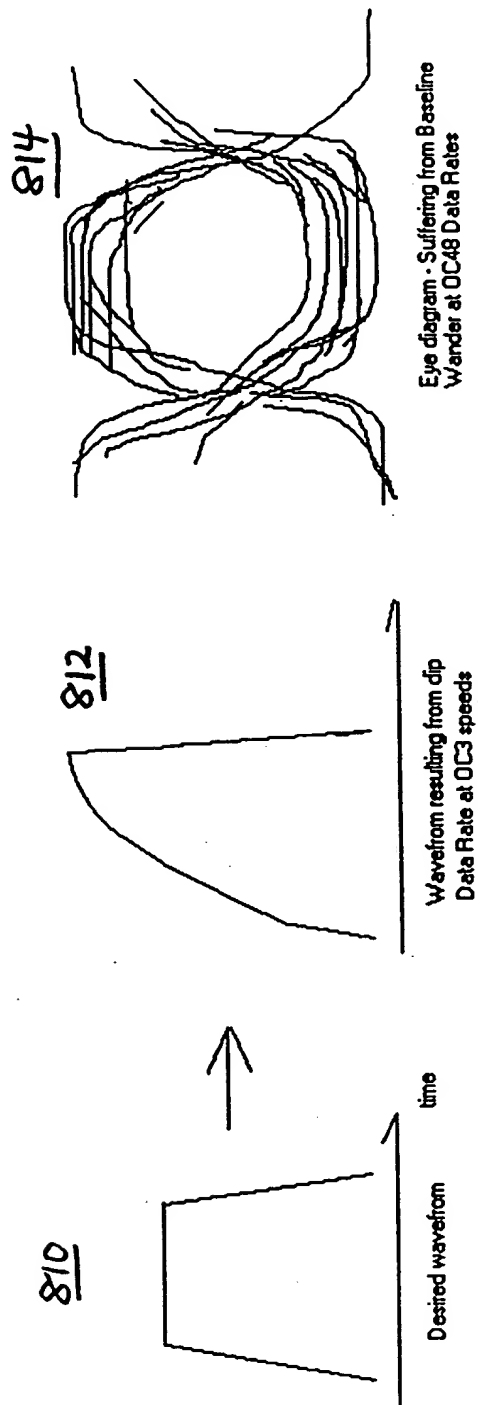Wander at OC48 Data Rates

FIG. 12A

816

AC
Magnitude
Response

low
frequency
Dip

Freq [log]

FIG. 12B

FIG. 13B

FIG. 13A